

IN THE CLAIMS:

1. (Currently amended) Method for monitoring a device used to guide an energy source (14), such as a handling device (12), for applying energy to a work piece (16, 18) that is positioned with the energy source within a protective cabinet enclosed by protective walls, wherein the energy source (14) moves at a speed V and the speed V of the moved energy source is established as the current speed V_{akt} , characterized in that a minimum speed V_{min} , which is dependent upon the power emitted by the energy source (14), and [[and/or]]

and at least one characteristic parameter of the protective walls that enclose the protective cabinet is established or preset; in that the current speed V_{akt} of the energy source is compared with the minimum speed V_{min} ; and in that if the current speed should drop below the minimum speed V_{min} , the energy source, which operates at $V_{akt} > V_{min}$ at constant power or nearly constant power, is deactivated immediately or following expiration of a period of time during which the actual speed is allowed to remain below the minimum speed.

2. (Original) Method according to claim 1, characterized in that especially a laser source or a heat source such as a flame is used as the energy source (14).

3. (Original) Method according to claim 1, characterized in that the time during which the current speed is allowed to remain below the minimum speed is established based upon the process parameter or parameters such as the output and/or the construction of a wall of the protective cabinet.

4. (Original) Method according to claim 1, characterized in that actual position value signals are registered by drive units (24 - 30), that from these actual position value signals Cartesian coordinates for the energy source (14) are calculated using a transformation operation, and in that the calculated Cartesian coordinates are compared with stored values and/or value ranges, in order to generate a signal to deactivate the system (12) and/or the energy source (14) if the transformed Cartesian coordinates should depart from the value and/or value range.

5. (Previously presented) Method according to claim 4, characterized in that a differential vector is calculated by subtracting a first set of Cartesian coordinates in a first sampling instant from a second set of Cartesian coordinates in a second sampling instant; in that a Cartesian speed for the energy source is determined over a time difference between the first and second sampling instants; and in that a signal for an uncontrolled deactivation of the drive units and/or the

energy source (14) is generated when the calculated speed falls below a preset minimum speed V_{\min} .

6. (Currently amended) Method according to [[at least]] claim 1, characterized in that monitoring of the current and minimum speeds is cyclical.